October 26, 1999 Supersedes April 27, 1999 Matls. I.M. 208

#### MATERIALS LABORATORY QUALIFICATION PROGRAM

## **GENERAL**

The FHWA has outlined a Laboratory Qualification Program in the Federal-Aid Policy Guide update published as 23 CFR 637 on June 29, 1995. The updated guide has requirements for laboratories performing testing on Federal-Aid highway projects on the National Highway System (NHS). The Iowa DOT must implement the program for laboratory qualification by June 29, 2000.

## **LABORATORIES TO BE QUALIFIED**

The following laboratories will be included in the qualification program for all projects on Interstate and primary routes:

Central Materials Laboratory
6 Transportation Center (TC) Laboratories
TC Area Laboratories
Resident Construction Laboratories
Aggregate Producer Laboratories

Ready Mix Laboratories
PCC Contractor Laboratories
ACC Contractor Laboratories
Consultant and Commercial Laboratories \*
City Laboratories \*

# **LABORATORY QUALIFICATION PROCESS**

A two-level qualification system is required by the FHWA. Laboratories are either accredited or qualified. The accreditation process is more rigorous than the qualification process.

## **Accredited Laboratory Process**

The Central Materials Laboratory and the six TC Laboratories will be accredited as outlined in the 23 CFR 637 guide. The Central Materials Laboratory is accredited through the AASHTO Materials Reference Laboratory Program. The TC Materials Laboratories will be accredited by using the Central Materials Staff and equipment to check testing and testing procedures and by using the same calibration and training documentation process. Laboratories will be accredited for a two-year period. In addition, an annual review will be made by the Central Office Staff. Appendix A contains the procedures for accrediting the Transportation Center Materials Laboratories.

<sup>\*</sup> May be qualified at the time of a project.

## **Qualified Laboratory Process**

The remaining laboratories will be qualified as outlined below:

The Transportation Center Materials Offices will qualify laboratories. Laboratories will be qualified for a two-year period. In addition, an annual review will be made by TC Staff. <u>Appendix</u> B contains the procedures for qualifying materials laboratories.

Three laboratory types will be qualified, aggregate laboratories, PC Concrete laboratories and asphalt mix laboratories.

Qualified laboratories will have the following:

- 1. Current manuals and test methods to perform the qualified testing available.
- 2. A technician certified by the Iowa DOT to perform the qualified testing.
- 3. Proper equipment to perform the qualified testing (calibrated or checked annually according to <a href="Appendix B">Appendix B</a>).
- 4. Satisfactory correlation and proficiency test results.
- 5. Documentation of equipment calibrations, equipment checks, and correlation results.

### ADMINISTRATION OF THE PROCESS

The Central Materials Laboratory will be responsible for implementation and operation of the Laboratory Qualification Program. The Central Materials Laboratory will accredit the TC Laboratories. The Transportation Center Materials Offices will qualify laboratories.

### NON-COMPLIANCE/DISPUTE RESOLUTION

A laboratory that does not meet the requirements of the I.M. is subject to elimination from the qualification program.

Disputes concerning calibration and correlation of equipment will be resolved by the office responsible for the qualification. For disputes that cannot be resolved at the Transportation Center, the Central Materials Laboratory will be the final authority.